

The University of Chicago

THE STATUS OF ELEMENTARY AND
SECONDARY SCHOOLS IN DUAL
AND IN UNIT DISTRICTS
IN ILLINOIS

A PART OF A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVISION OF THE
SOCIAL SCIENCES IN CANDIDACY FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATION

1936

By

CLOY ST. CLAIRE HOBSON

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CHAPTER I

INTRODUCTION

The Development of the Public School System in Illinois

The public school system in Illinois had its beginnings in two semi-public institutions, the rudimentary school and the academy. Both of these institutions charged tuition. The first legal provision for the establishment of free common schools was embodied in an act approved by the General Assembly in 1825. By this act free common schools were authorized in communities having fifteen or more families. At the next session of the General Assembly, however, the payment of taxes for the support of schools was made optional with the tax payer. The common school remained practically a tuition school until the General Assembly passed the free school act in 1855. This act provided the ground work for all future school legislation in Illinois.

Probably because of the high tuition rates and the geographical inaccessibility of the academies, the common school, under the pressure of public opinion, began early to teach secondary-school subjects. The semi-public academy, however, remained the dominant secondary school in Illinois until about 1850. The public high school as an extension of the common school developed as an extra-legal institution and existed by the common consent of the people in some districts until 1872 when the conception of the high school as a public institution was embodied in the general school law. Court decisions, however, were required to establish the high school definitely as a division of the public school system.

The high school was soon found to be an expensive institution. The limited proceeds of the common school tax were not sufficient in most districts to support adequately both the common school and the high school. The township of Princeton in Bureau County in 1866 petitioned the General Assembly to permit the organization of a high-school district independent of the local common-school districts. The permission was granted and the first township high school in Illinois was organized in 1867 under a

special charter authorizing the establishment of such a school in Princeton. The charter provided a method for organizing an entire township into a single school district for high-school purposes and gave to the board of education of the district the power to levy a tax equal in rate to that permitted in a common-school district. The provisions of this special charter were embodied in a general township high-school law in 1872 and as a result Illinois was committed to the dual system of school administration. Some people thought this plan would make it possible for both high schools and elementary schools to secure adequate support.

Since Congressional township boundaries do not always describe a compact or convenient community for high-school purposes, amendments were passed in the General Assemblies of 1889, 1891, 1897, 1901, and 1905 giving wider and wider latitude in the selection of boundaries for township high-school districts. Eight types of boundaries were authorized. In 1909 the general township high-school law was rewritten to include the amendments. By an act of 1911, sometimes called the first community high-school law, the necessity of using township lines to describe the territory included in an independent high-school district was abolished. This act was declared unconstitutional by the Illinois supreme court in 1916. In 1917 new amendments to the law of 1909 were enacted which used the terms "community high school" and "community high-school district."

In 1919, however, the Illinois Supreme Court declared section 89 of the 1917 law unconstitutional because it delegated legislative power to the county superintendent. The General Assembly passed section 89a replacing section 89 and providing for a community high-school district in any compact and contiguous territory whether in the same or in different townships. In 1921 the Supreme Court declared section 90 of the 1917 law unconstitutional because it lodged legislative power in the state superintendent. In 1923 the General Assembly approved amendments to the act of 1909 and to section 89a of 1919. The law now in force reads in part as follows:

- A community high school district may be established in the manner following, in any territory
1. Which is compact and contiguous;
 2. Which either comprises a community center or includes within its limits a community center;
 3. The limits of which do not extend more than one half the distance approximately between the community center of the

- proposed district and another community center; or beyond a natural boundary between the community center in the proposed district and another community center;
4. In which there will be a probable attendance of seventy-five or more students who have graduated from an elementary school and who have not graduated from a high school; and
 5. Which does not include any territory which at the time maintains or is a part of a district which maintains a high school.

The circuit court, or the judge if the court is not in session, has the power to decide whether the proposed community high-school district conforms to the legal description given above.

After 1917 only a few new township high-school districts were organized. For those organized under the unconstitutional laws, curative legislation was enacted in subsequent sessions of the General Assembly to validate their organization and the acts of their boards of education. Because of the confusion in the law few community high schools were organized until after 1923. In 1920 there were only 3 community high schools in the State, but in 1931 there were 290.

A non-high-school district is described as all territory in a county which is not included in a township or a community high-school district or in a district containing a recognized four-year high school. Its purpose is to levy a tax and pay the tuition of its eighth-grade graduates who attend high school. These eighth-grade graduates may attend the high school most convenient for them. The non-high-school districts are not included in this study since they do not maintain secondary schools.

Types of Districts and Their Taxing Power

The statistical report of the State Superintendent of Public Instruction for 1931 listed 938 high schools of all types. For the purposes of this study three types of high school are distinguished: the high school organized as an extension of a common school and supported by the common school district,¹ the township

¹A common school district which organizes and supports a high school is called in this study a unit district and the high school so organized and supported is called a unit high school. The term township district or community district refers to the territory described by the township or community high-school district boundaries and includes the high school, the city elementary school or schools, and the rural schools in the territory. Township and community high schools are referred to as independent high schools. The term city elementary school is used to dis-

high school, and the community high school. Only four-year recognized high schools are used. There were sixteen community consolidated districts in the State in 1930-1931 which maintained four-year recognized high schools. They are classified with the unit districts since they are like the unit districts in organization and differ from them only in that the boundaries are usually extended to include more rural territory than is included in a unit district. Six of the community consolidated districts are included in the study.

The unit districts maintain both high schools and elementary schools as a single school system. In each township or community district there is one high school independent of the underlying city elementary and rural districts.¹ The township districts in this study include an average of 1.38 city elementary and 7.85 rural elementary districts and the community districts include an average of 1.40 city elementary and 9.02 rural elementary districts. The unit districts must maintain the high school and the elementary school on a single tax, limited to a rate of \$1.00 for educational purposes and \$.375 for building purposes per \$100.00 of equalized full assessed valuation. In the township or community district, each elementary district, city and rural, may levy a tax for its purposes and the high-school district may levy a separate tax for its purposes, each of which may be equal in rate to the single rate in the unit district. By a referendum vote, however, the tax rate may be raised above the statutory limit of \$1.00 and \$.375. The unit district, if it maintains both an elementary school and a high school, may vote taxes requiring rates as high as \$2.50 and \$.875, a total possible rate on the property of \$3.375 per \$100.00 of valuation. Each division of an independent high-school district may vote taxes requiring rates as high as \$1.50 and \$.50, a total possible rate on property in an underlying elementary district of \$4.50. Thus, the taxing power for schools as measured by legal tax rate, may without referendum be twice as large in the township and community

tinguish the elementary schools in villages and cities from those in rural districts. The latter are called rural elementary schools or rural schools.

¹The high school, the city elementary school, and the rural elementary school are designated in this study as divisions of the high-school district in which they lie.

districts as in the unit districts, and with referendum one and one-third times as large.

The Problem

The dual system of school organization in Illinois, which permits an independent high-school district to be formed out of and to overlie existing city and rural elementary districts, has called forth much adverse criticism. It has been charged, first, that the plan increases the tax burden by permitting a double tax on property in the districts so affected. Second, it permits an unfair tax on rural property, since, throughout the State as a whole, the rural areas pay approximately three-fifths of the high-school tax and send to the independent high schools only three-tenths of the pupils. Althaus¹ found that the rural property in the independent districts composes 61 per cent of the total value of the districts and, hence, pays 61 per cent of the local tax. The urban property, therefore, pays only 39 per cent. On the other hand, only 30 per cent of the pupils in the independent high schools come from the rural districts and 70 per cent come from the urban districts. Third, the non-high-school district is not taxed as high as the rural area included in the independent high-school district, although it receives equal advantages for its children. Fourth, wealth in such form as factories or improved estates may locate in non-high-school territory, adjacent to cities, in order to escape the higher tax in independent high-school or city districts, even though the children of the employees attend the near-by high school for the support of which the non-high-school district pays no direct tax but only the tuition of the pupils attending. Fifth, the rural population in a high-school district has little voice in the management of the school since it is usually out-voted by the urban population. Sixth, because of their independent taxing power, the township and community high schools can collect more revenue than the unit high schools, and, it is charged, they sometimes expend it extravagantly. Seventh, an elementary school underlying an independent high school may be forced to deny itself an adequate income even

¹Carl B. Althaus, The Distribution of the Tax Burden of Township and Community High Schools in Illinois, p. 71. Chicago: The Illinois Agriculture Association, 1927.

though it has independent taxing power. Interest and pride in the high school may give popular approval to such a high tax for high-school purposes that the elementary-school board may, in order to keep the total school tax in the district down, levy an inadequate tax for elementary-school purposes. Eighth, multiple administrative organizations in the same territory, one for each of the elementary schools and one for the secondary school, make for waste and inefficiency in the duplication of material equipment and administrative staff and in the lack of articulation between the elementary and secondary divisions of the school. Ninth, the statutes and the policy of the office of the State Superintendent encourage the organization of a large number of small independent high schools and so make economic and efficient school administration in the State difficult if not impossible. Tenth, the law creating the dual system of school organization prevents the development of modern school reorganizations, such as the 6-3-3 plan. If these ten charges against the independent high school are sustained and no substantial advantages over the unit high school are discovered for it in the findings of this study, the conclusion will per force be that the independent high school has little if any place in the educational system of the State.

The advantages claimed for the independent high school are adequately expressed in Hollister's glowing summary.

1. The union of town and county in maintaining a truly democratic high school with equal opportunities, according to talent or inclination, for the children of all classes.
2. It thus offers the best possible method of providing free high-school privileges, as it involves the participation of all classes in management as well as maintenance.
3. It provides sufficient resources, without excessive cost to the individual, for maintaining a well equipped and broadly organized school.
4. It greatly increases facilities in the State for the preparation of a sufficient number of reasonably well qualified teachers for the rural schools.
5. By laying a foundation for fuller cooperation in maintaining schools it prepares the way for complete consolidation of rural schools, and establishes a logical basis for their complete supervision.
6. It furnishes a strong community center for carrying forward those broader educational interests lying outside of the popular school program for the education of the children only.¹

¹Horace A. Hollister, The Township and Community High-

If it is found that these advantages are fully realized the existence of the independent high school will be justified.

Many investigations have been made by students of school administration in Illinois to discover the alleged advantages and disadvantages of the overlying independent high-school district. These studies have given particular attention to the differences between the unit high school and the independent high school but have neglected the underlying elementary schools. Reeves¹ gave more attention than any other investigator to the underlying elementary school. He compared the tax rates and the per pupil costs in township and community high schools with the per pupil costs in their underlying elementary schools. He did not make comparisons of per pupil costs between the elementary schools in unit districts and those underlying independent high schools. The present study attempts, in an effort to test the charges against the independent high school and the advantages claimed for it, to discover how both the high schools and elementary schools in the unit districts differ from those in the two types of independent high-school districts in the State. Attention is given particularly to the differences between the elementary schools underlying the three types of high schools in order to determine how the influence of the independent high school organization on underlying elementary schools differs from that of the unit organization.

Data were secured concerning the following items for the high schools and elementary schools in the three types of districts: assessed valuation, tax levies, tax rates, expenditures, enrolment, average daily attendance, pupil-teacher ratio, holding power of the high school, training of teachers, experience and local tenure of teachers, salaries of teachers, and the costs for administrative leadership. Differences between the schools in the unit districts and those in the independent high-school districts are discovered through a comparison of these data.

School Movement in Illinois, p. 28. United States Bureau of Education Bulletin No. 35. Washington: Government Printing Office, 1917.

¹Floyd W. Reeves, The Political Unit of Public School Finance in Illinois, pp. 97-108. Educational Finance Inquiry, Vol. X. New York: Macmillan and Co., 1924.

Plan and Scope of the Study

Three groups of high schools, with their underlying elementary schools, are eliminated from consideration in this study, because the data for these schools are influenced by conditions that do not obtain for the majority of schools in the State. First, the data for high schools offering fewer than four years of work and those offering four years but having only "probationary" or no recognition are eliminated from the comparisons. They are not required to conform to the rigid standards for instruction and equipment prescribed for the four-year schools having "regular" recognition. The four-year "regularly" recognized high schools have attained common, well-defined, minimum standards and so are more nearly homogeneous than are all the high schools in the State.¹ Second, the high schools in Chicago and Cook County and in the cities of Peoria, Rockford, East St. Louis, and Springfield are eliminated, because the influence of metropolitan conditions on finance, selection of teachers, and retention of pupils makes their data incomparable with those of other schools in the State. Third, the high schools connected with universities and colleges are eliminated, because the instructional, supervisory, and financial conditions peculiar to them make them distinctly atypical. After the elimination of the schools in these three groups, 566 of the 938 high schools in the State remain from which the samples for the study are taken. The distribution of the 566 high schools according to type, size of enrolment, and section of the State is shown in Table I.

In order to divide the 566 high school districts into relatively homogeneous groups for the comparison of data, two bases of classification are used. First, the high schools are classified on the basis of enrolment into four groups. Group I contains the districts with high-school enrolments of 50 to 100 pupils; Group II, 150 to 250; Group III, 300 to 450; and Group IV, 500 to 1000. A gap of 50 is left between the maximum enrolment

¹The percentages of the high schools of less than the four-year grade belonging to each type and the size of the communities in which they are most common are discussed briefly in Chapter II in order to show how high-school facilities are provided in the smaller communities. (References to material not included in this essential portion may be found in the complete dissertation on file in the University of Chicago Libraries.)

TABLE I

DISTRIBUTION OF THE 566 HIGH SCHOOLS, FROM WHICH THE SAMPLE SCHOOLS TO BE STUDIED WERE TAKEN, ACCORDING TO TYPE, SIZE OF ENROLMENT, AND SECTION OF THE STATE

Type of District	Enrolment Group	Number of High Schools			
		Northern Section	Central Section	Southern Section	All Sections
Unit	Fewer than 50	4	2	0	6
	I 50 to 100	15	15	12	42
	101 to 149	9	9	12	30
	II 150 to 250	9	10	5	24
	251 to 299	2	1	2	5
	III 300 to 450	3	6	3	12
	451 to 499	1	1	0	2
	IV 500 to 1000	8	5	2	15
	More than 1001	3	5	0	8
	Groups I,II,III,IV	35	36	22	93
	All other groups	19	18	14	51
Township	Fewer than 50	9	3	0	12
	I 50 to 100	30	22	6	58
	101 to 149	16	13	3	32
	II 150 to 250	7	15	4	26
	251 to 299	5	5	1	11
	III 300 to 450	6	3	3	12
	451 to 499	1	0	2	3
	IV 500 to 1000	5	1	10	16
	More than 1001	4	0	0	4
	Groups I,II,III,IV	48	41	23	112
	All other groups	35	21	6	62
Community	Fewer than 50	8	10	5	23
	I 50 to 100	30	59	17	106
	101 to 149	18	27	9	54
	II 150 to 250	13	10	6	29
	251 to 299	3	4	3	10
	III 300 to 450	6	4	5	15
	451 to 499	1	2	0	3
	IV 500 to 1000	2	3	2	7
	More than 1001	0	0	1	1
	Groups I,II,III,IV	51	76	30	157
	All other groups	30	43	18	91
All types	Groups I,II,III,IV	134	153	75	362
	All other groups	84	82	38	204

of each group and the minimum enrolment of the next higher group in order to eliminate, at least partially, overlapping in any characteristics which may result from size of enrolment between consecutive groups. If no gap were left such overlapping would be more likely to occur, for a school of 100 pupils is likely to differ less from a school of 101 pupils than from a school of 150 pupils. Likewise wider ranges of enrolment are included in the

higher enrolment groups than in the lower for two reasons: first, if wider ranges were not used in the upper groups, there would not be enough schools in these groups to make reliable comparisons and second, a larger difference in enrolment between two schools in the upper enrolment groups may occur than between two schools in the lower enrolment groups without much change in the significant features of the schools; that is, two schools of enrolments of 300 and 450 are likely to resemble each other as much as two schools of enrolments of 50 and 100.

The high schools are classified, secondly, according to their location in the State. The State is divided into three sections called Northern, Central, and Southern based on the division of counties made for the election of members to the state examining board. The division of the State into sections is shown in Figure 1. The sections are approximately equal in size¹ and differ distinctly from each other in general economic conditions.

The selection of high-school districts to be used in the study was made from the alphabetical list of schools in the Illinois High-School Directory for 1930-1931. A sampling of high schools in each classification² was taken as the names of the schools occurred in the alphabetical list. It was at first considered that 5 or 6 high schools in each classification would constitute an adequate sampling. Two difficulties were experienced in following the plan of sampling set up: first, in some classifications there were fewer than five high schools in the State, and second, it was impossible to get the required data for some of the high schools selected. It was, therefore, not possible to fill each of the 36 classifications with the 5 or 6 high

¹Each section contains 34 counties. There are 218 of the 566 high schools in the Northern Section, 236 in the Central, and 113 in the Southern.

²The term, classification, is used to designate all those districts which may be described by one type, one group, and one section of the State, as unit districts of Group I in the Northern Section. There are in the study thirty-six such classifications. In addition to single classifications, several combinations of classifications are made to show the following averages: first, for all enrolment groups in each section, second, for all sections in each enrolment group, and third, for all sections in all enrolment groups. There are twenty-four combinations of the classifications.



Fig. 1.--Division of Illinois into sections: Northern, Central, Southern.

schools called for by the original plan. Complete data were finally secured from 125 high-school districts located in 61 of the 102 counties of the State.

The use of a small group or sample to represent all the schools in the State introduces two types of possible error. The first type includes errors arising from a failure to secure a random sample; the second includes errors arising from the use of a sample which may be nearly, but not quite, representative of the entire group. The second type of error is represented by the probable error of the mean and can not be computed reliably in the short, unsymmetrical distributions of this study.¹ The first type of error is discussed here.

The sample used in this study is not purely random, because three classes of schools are eliminated from consideration.² The schools eliminated differ in essential particulars from the remaining 566 high schools of the State and should be studied as three separate groups. This study makes no attempt to consider them separately or to include them in the sample selected for study.

The sample is taken at random from the 566 high schools remaining after the three classes of schools described on page 8 are eliminated. The schools were selected in the order in which they appear in the alphabetical list in the Illinois School Directory until the several classifications were filled or until the list of schools was exhausted. Two conditions may have interfered with the random sampling. A gap of 50 pupils is left between the upper limit of each enrolment group and the lower limit of the next higher enrolment group.³ Of the 566 high schools, 204⁴ are thus eliminated from consideration. It is obvious, however, that the schools thus eliminated are well represented by the schools remaining, since, for example, an eliminated school of 125 pupils does not differ much from an included school of 90 or 160 pupils, nor one of 475 pupils from one of 425 or 525 pupils.

The second condition which may have interfered with the

¹See p. 18 for further discussion.

²See p. 8 for classes of schools eliminated.

³See Table I.

⁴Ibid.

random sampling is the elimination of some schools selected for the sample because incomplete reports from them make their data unusable. It appears to the author, however, that the reasons for the incomplete reports have nothing to do with the character of the data which might have been reported, that these schools differ very little from the schools for which complete reports were received, so the omission of these schools probably does not affect the representativeness of the data of the schools used in the sample. Two high schools, Quincy and Alton, with enrolments slightly over 1000 pupils were included in Group IV to make the sample more nearly representative.

The sample is adequate numerically and well distributed throughout the classifications of the study. Of the 566 high schools from which the sample is taken, 125 or 22 per cent are used. The number of the sample high schools in each classification is shown in Table II. A comparison of Tables I and II reveals that the ratios of the number of sample schools to the total number of schools in the several classifications do not vary widely. These ratios are expressed in Figures 2 and 3 as percentages. The percentages range from 10 to 63 with the average at 22.¹ Since the comparisons made in the chapters that follow are usually made between combinations of classifications and not between single classifications, the sampling is entirely adequate numerically and is well distributed for the purposes of this study. Underlying the 125 sample high schools selected for study in this investigation are 156 city elementary schools and 684 rural schools. In these schools there are 1739 high school teachers, 2723 city elementary teachers, and 724 rural teachers, and 36,197 high-school pupils, 92,482 city elementary pupils, and 14,745 rural pupils. The material for the study, therefore, contains data concerning 965 schools, 5186 teachers, and 143,424 pupils.

¹These percentages are computed with the total number of schools, 566, which includes those in the intervals above and below the limits of the enrolment groups. The percentages would be higher if they were computed with only the 362 schools within the enrolment groups. They would range from 17 to 100 with the average at 35. The higher percentages, it will be noted, occur in the classifications in which the total number of high schools is so small that a high percentage of them is needed to make an adequate sample, numerically.

TABLE II

DISTRIBUTION OF THE SAMPLE HIGH SCHOOLS AS TO TYPE, ENROLMENT GROUP, AND SECTION OF THE STATE

Type of District	Enrolment Group	Number of High Schools			
		Northern Section	Central Section	Southern Section	All Sections
Unit	I	6	5	5	16
	II	3	3	4	10
	III	3	3	2	8
	IV	4	4	2	10
	All groups	16	15	13	44
Township	I	5	9	2	16
	II	3	2	0	5
	III	5	3	1	9
	IV	2	1	7	10
	All groups	15	15	10	40
Community	I	3	8	7	18
	II	6	2	2	10
	III	4	1	3	8
	IV	2	3	0	5
	All groups	15	14	12	41
All types	All groups	46	44	35	125

In order to discover the financial conditions under which the three types of districts operated in 1931, four kinds of data were examined: assessed valuation, expected income, tax rate, and expenditures for current expenses. Assessed valuation, treated in Chapter II, represents the basic ability of an Illinois school district to raise funds, since more than eighty per cent of the school funds in the districts studied is derived from local taxation. The relative abilities of the three types of districts to raise funds are expressed in terms of the relative average assessed valuation per pupil in average daily attendance of the districts in the several classifications. The comparison of averages in the several classifications of districts makes it possible to show the variations in ability to raise funds in the several sections of the State and in the several enrolment groups.

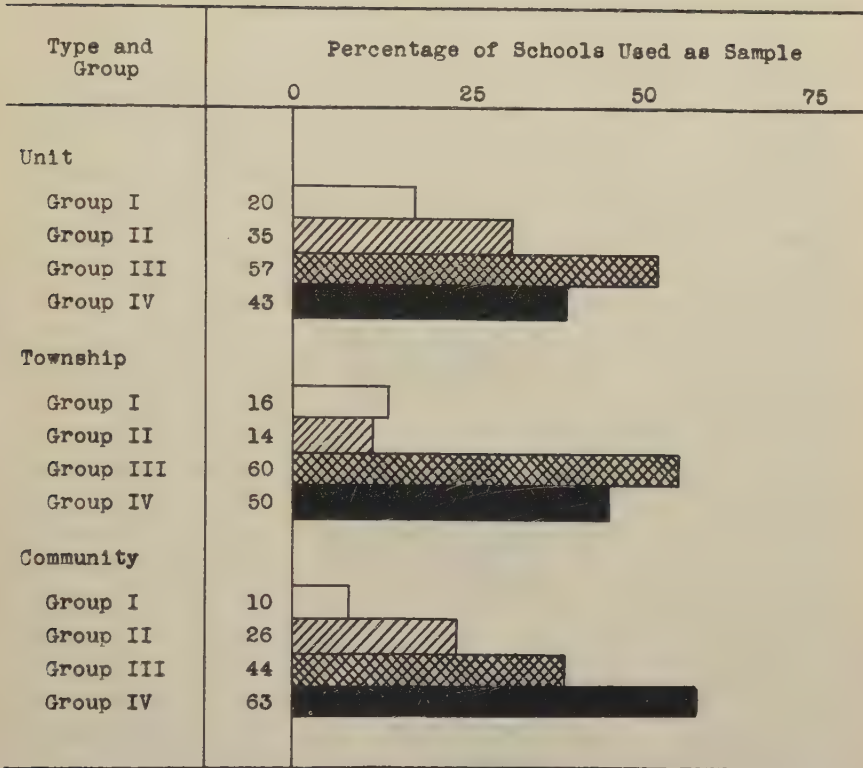


Fig. 2.--Percentage of the selected schools of each type and group in all sections of the State used as the sample studied.

Tax rate is a measure of the effort which a district makes to support education. A relatively high rate, for example, indicates that a district has devoted the income from a relatively large part of its wealth to education. The comparisons made in Chapter III of the average tax rates of the districts in the several classifications reveal the relative effort which the three types of districts make to pay the costs of education.

In Chapter IV expected income is treated. Expected income, as used in this study, is the sum of the tax levy, the expected tuition for non-resident pupils, and the amount of the claim for state aid. Each year a school district plans its expense budget on the basis of the income which it expects to re-

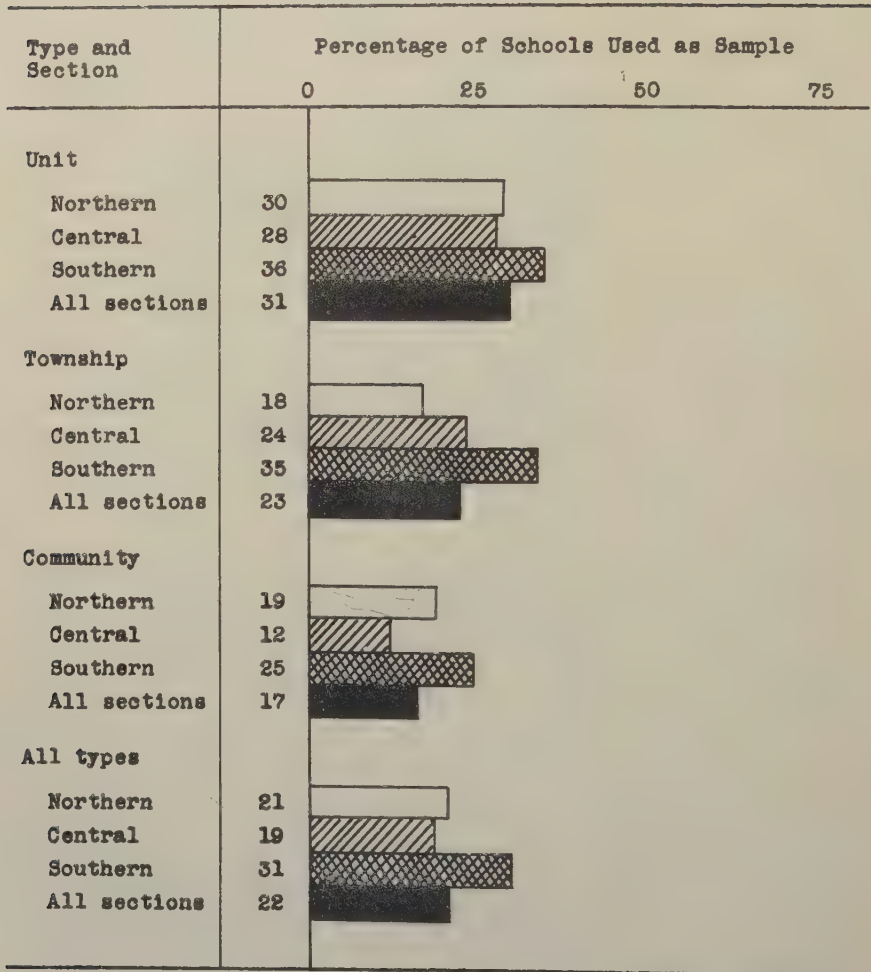


Fig. 3.--Percentage of the selected schools of each type and section used as the sample studied.

ceive. If a district expects a small income, it necessarily plans a less elaborate budget for education than if it expects a large income. The average incomes which the districts in the several classifications expect to receive are compared in order to determine the relative financial bases on which the three types of districts may plan their expense budgets.

The actual expenditures of a school district for current expense is a more exact index of the provision of the district for education than valuation of property, expected income, or tax rate. In Chapter V comparisons of the average expenditures of the districts in the several classifications are made in order to measure more exactly the relative provisions for education in the three types of districts.

If the findings of Chapters II, III, IV, and V reveal that one type of district has a higher assessed valuation, expects a higher income, assesses a higher rate of tax, or spends a larger amount of money for educational purposes than another type, it is probably true, although not necessarily so, that that type of district gives its pupils a better education than the other type. There are, for example, no established standards of school finance which state conclusively what a district should spend for each pupil in average daily attendance. Indeed, if there were such a standard, the district which spends the required amount might in some instances provide no better education than a district which spends less, but might merely be guilty of mismanagement and extravagance. Unfortunately, there are no state wide measures of educational efficiency that are objective and reliable through the use of which it might be determined whether one type of district secures more and better educational advantages for the funds at its disposal than another. The districts in this study are merely compared on the basis of tangible, factual data concerning teachers and pupils which are regarded as good measures of potential educational efficiency.

In Chapter VI the data concerning pupils are presented. These data include averages of enrolment and attendance and make it possible to compare the districts of the three types as to pupil-teacher ratio and as to regular and continued attendance of pupils. In Chapter VII the data concerning teachers and administrators are presented. Comparisons are made of the practices of the three types of district in attracting and holding teachers of

varying degrees of training and experience and of the per district and per pupil costs for administration.

In Chapter VIII the findings and conclusions of the study are presented.

All comparisons of the three types of districts are made on the basis of the central tendency and variability from the central tendency of the data pertaining to the districts in the classifications under consideration. For example, the arithmetical mean or the average of the per pupil valuations of all the unit districts in the Northern Section of the State, the range of per pupil valuations, and the standard deviation of the per pupil valuations have been computed and are included in Table III with like data for the corresponding township and community districts. The other basic tables in the dissertation are made up in the same manner. The average is useful to express the central tendency of the measures in the distribution. If any one measure is typical of the distribution it is the average. The average, however, does not completely represent the measures of the distribution. The variation of the measures from the central tendency may be discovered by the use of the range, which shows the largest measure and the smallest measure in the distribution, and by the use of the standard deviation, which shows the manner in which the measures cluster around the central tendency or the average. The standard deviation (called S.D.) is described as that distance on the scale of values in a distribution which, when laid off on each side of the average, includes approximately two-thirds of the measures. By its use the compass within which the central two-thirds of the measures lie may be determined.

The probable error of the mean and the probable error of the difference between two means, if computed, would show the magnitude of the sampling error of the mean and whether the difference between two means was a true difference or occurred because of an unfortunate selection of the sample. These quantities cannot be computed with reliable results in the short and unsymmetrical distributions found in the data under consideration in this study. The averages will, therefore, be compared without use of the usual statistical procedures. The ranges and standard deviations will be used merely to show the nature of the variations from the averages of the measures included in the study, and not to show the probable error resulting from the small

sample. The sample, though small, is considered adequate numerically.¹ The significant comparisons in the study are made from samples which are numerically large percentages of the total number of districts within the classifications which the samples represent. In the unit districts these percentages range from 25 to 75 with the average at 47; in the township districts, from 13 to 75 with the average at 36; and in the community districts, 17 to 71 with the average at 26. When the total number of districts is so well represented numerically by the sample, it seems unnecessary to utilize the probable error of the sampling even if it could be computed with reliable results.

¹See discussion on pp. 12-16.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

The data presented in this study show that wide differences in the opportunities for education and in the tax burdens imposed for the support of education exist among the school districts of the State. These differences are greater under the dual administrative organization than under the unit organization. The dual organization was devised chiefly because many of the local districts were too small and too poor in financial resources to support both an elementary and a secondary school. The independent high-school district with its larger area, greater wealth, and independent taxing power can provide high-school advantages in many localities where such advantages cannot be provided individually by the local districts. This one advantage of the independent high school, however, as important as it is, is offset by serious disadvantages. The chief disadvantage is that the independent high-school district solves only partially the problems of secondary education and impedes the solution of the problem of local elementary education in the area in question.

This chapter summarizes briefly the differences between the corresponding divisions of the three types of districts in the several classifications. It points out how the hodgepodge of unrelated administrative units fails to function effectively and to provide adequate facilities for local education throughout the State.

Differences in All Sections of the State Combined

Valuation.--Since 83 per cent of the revenue for educational purposes expected by the districts in this study is derived from a tax on local property, the advantages of the township and community districts over the unit districts in ability to raise revenue for schools may be expressed largely in terms of

the differences in assessed valuation¹ per pupil. The unit districts have an average valuation of \$5,064 per pupil² in average daily attendance; the township districts, \$8,641; and the community districts, \$10,019. For each \$1.00 per pupil raised in the unit districts, the township districts may raise with an equal tax rate \$1.71 and the community districts, \$2.00. The basic financial advantage of the independent districts over the unit districts is therefore clear.

The differences between the three types of districts in valuation per pupil are caused in part by the inclusion of rural areas in the independent districts. The township districts collect 62 per cent of the tax from the urban and 38 per cent from the rural areas of their districts; in the community districts the percentages are 57 and 43, respectively; whereas the unit district must collect all its tax from the local urban district.

It may be reasoned that the unit districts may overcome some of their basic financial disadvantage by collecting tuition from the pupils from the adjacent rural areas. Under the independent high school organization the adjacent rural areas are in the high-school district and pupils pay no tuition to the independent high school. The unit districts in this study expect 13 per cent of their income from tuition of high-school pupils who come from non-high-school or from other high-school districts. Township and community high schools also have non-resident pupils and expect from tuition 8 per cent and 5 per cent, respectively, of the total incomes accruing to such districts and their underlying elementary-school districts. If the tuition pupils have about the same geographical origin relative to the three types of districts, we may assume that the unit districts collect about 5 per cent more of their income than the township districts and 8 per cent more than the community districts from the tuition of high-school pupils who live in near-by rural areas and who would

¹Since the property in the independent districts is taxed twice, once for high-school purposes and once for the underlying elementary-school purposes, the valuations are used twice in these computations to make them comparable with the valuations in the unit districts where the property is taxed only once.

²High-school and elementary-school pupils are counted together in these computations so the average pupil is a composite, part high-school and part elementary-school.

not be tuition pupils in the independent districts. Thus, the overpluses of 5 per cent and 8 per cent of the income in the unit districts derived from tuition constitute an offset to the portion of the tax which the township and community districts collect through their levies on rural property (38 per cent and 43 per cent, respectively). The power to tax the rural areas of the district for high-school purposes is obviously a distinct advantage of the independent district over the unit district since the amount of the tax is much greater than the amount of the tuition that could be assessed if the rural areas were not within the district.

The independent high school tends to increase the inequalities in the tax burden for supporting schools. It taxes directly for high-school purposes the rural territory that under the unit district system would be in the non-high-school district. In so far as the independent high school includes within its boundaries all the rural territory from which it draws its pupils, it may be said to require the rural property to share the tax burden equally with the urban property. Since, however, the rural areas in the township districts include 38 per cent of the total wealth and in the community districts 43 per cent,¹ and since only 14 per cent of the total number of pupils in the township district and 17 per cent in the community districts are found in the rural areas,² the rural property pays a disproportionately high tax for the number of children to be served. But the independent high schools do not include within their boundaries all the territory from which they draw their pupils since the township high schools derive 18 per cent³ and the community high schools 11 per cent⁴ of their income⁵ from tuition of non-resident pupils. The tuition of a non-resident pupil in Illinois amounts to the per capita cost for current expenses only and pays no part of the capital costs. The non-resident pupils do not, therefore, as is the case likewise in the unit districts, bear their full share of the costs of maintaining the high school. Thus, the

¹See Chapter II and Table VI.

²See Chapter VI and Table XXXV.

³See Chapter IV and Table XXVI.

⁴See Chapter IV and Table XXVIII.

⁵Income for high-school purposes only.

independent high school operates to preserve the inequalities in the tax burden for schools by excusing the parents of non-resident pupils from bearing their full share of the costs of maintaining the school and to increase it by assessing a disproportionately high tax for the children served against rural property within the district.

A comparison of the average valuation of property per pupil in the three divisions of the independent districts indicates the relative income which each division, since they may assess equal tax rates, may raise from taxation. The township high schools have an average valuation per pupil of \$15,729, the underlying city elementary schools have \$4,681, and the underlying rural elementary schools have \$12,099. In the divisions of the community districts the average valuations per pupil are: \$19,488, \$5,056, and \$12,509, respectively. If each district levies the maximum rate, the township high schools may collect from taxation \$157.28 per pupil; the city elementary schools, \$46.81; and the rural schools, \$120.99. In the community districts the divisions may collect \$194.48, \$50.56, and \$125.09, respectively. The high schools in the independent districts may raise by taxation between three and four times as much money per pupil as their underlying city elementary schools.

Income.--The unit districts do not differ from the independent districts as much in expected income as might be inferred from the wide differences in valuation. The unit districts expect about \$81 per pupil; the township districts, \$83; and the community districts, \$93. For each \$100 expected by the unit districts, the township districts expect \$102 and the community districts expect \$115. That the township and community districts use only a part of their taxing advantage over the unit districts and collect less revenue from other sources is disclosed by an examination of the percentages of income derived from the several sources.

The unit districts expect 79 per cent of their total income from local tax returns as compared with 85 per cent and 87 per cent, respectively, in the township and community districts. The independent districts depend more on revenue from local taxes than the unit districts and so need, and use,¹ a part of their

¹Another proof that the independent districts use their

taxing advantage. The percentage of income from other sources expected by the three types of districts is: tuition--unit, 13; township, 8; and community, 5; state funds--unit, 8; township, 7; and community, 8. The unit districts are apparently able to use the larger income from tuition to reduce the tax burden below that in the independent districts. Although the three types of districts expect about the same percentage of their incomes from State funds, the elementary schools in unit districts make no claims at all for special equalization aid, whereas 7.4 per cent of the elementary schools in township districts and 9.6 per cent of those in community districts make such claims. Local financial conditions in the elementary districts underlying independent high schools are apparently not as satisfactory as in the unit districts.

The distribution of the expected income of the divisions of the independent districts is significant. The township high schools expect \$149 per pupil compared with \$57 and \$74, respectively, in their underlying city and rural elementary schools. The corresponding amounts in the community districts are: \$162, \$67 and \$76. The independent high schools plan to use about two and one-half times as much money per pupil as their underlying city elementary schools. In order to have this relatively large amount of money per pupil, the independent high school must have a large share of the income in the district. It is apparent that the greater income expected by the independent districts over that expected by the unit districts is devoted largely to high-school purposes and that the elementary school has little or no share in it. The significance of the variations in the distribution of funds between the divisions of the independent districts from section to section and from group to group will be discussed in subsequent sections of this chapter.

Tax rate.--A comparison of the tax rates in the three types of districts indicates that the independent districts, considered as a combination of the high-school and city elementary-school divisions corresponding to the two divisions of the unit districts, utilize a part, but not all, of their taxing advantage over the unit districts. If each type of district exercised its

taxing advantage over unit districts is furnished by the comparison of tax rates presented below.

full taxing power, the rates in the independent districts would be twice the rates in the unit districts, both for current expenditures and for capital expenditures. The average rates for the districts in this study are, however, for current expenditures: unit, 1.28; township, 1.78; and community, 1.69 and for capital expenditure: unit, .48; township, .53; and community, .56. The rates in the township and community districts are, respectively, 39 and 32 per cent higher for current expenditures and 10 and 17 per cent higher for capital expenditures than those in the unit districts, whereas they might be in each case 100 per cent higher if full taxing advantage were utilized. It is apparent that, although the independent high school was organized chiefly to secure a larger revenue by the exercise of independent taxing power applied to the increased valuation of the larger district, the two divisions of the district combined are in general, able to support their schools without exercising the full combined taxing power.

An examination of the tax rates in the separate divisions of the independent districts, however, reveals that the township and community high schools meet their financial obligations with much less effort, as measured by tax rate, than their underlying city elementary schools. The rates for current expenditures in the divisions of the township districts are: high school, .75; city elementary, 1.03; rural, .56. The corresponding rates in the community districts are: .71, .98, and .60. The high-school district apparently finds that the increased valuation, resulting from the inclusion in the district of adjacent rural property, makes it unnecessary for it to utilize its full independent taxing power to secure the revenue it needs. The underlying city elementary-school district, however, even though it is relieved of the expense of supporting a high school, but without any addition to its valuation, finds that it must utilize almost its full taxing power to support its activities.

Expense.--A study of the current expenditures¹ per pupil in average daily attendance in the high schools and city elementary schools combined in the three types of districts reveals that the township districts spend no more and the community districts spend but little more than the unit districts: unit,

¹See p. 58 for definition of current expenditures.

\$86; township, \$86; community, \$91. The financial advantages which the independent districts have over the unit districts are not reflected at all in the township districts and only slightly in the community districts in current expenditures per pupil.

When the current expenditures per pupil in the separate divisions of the township and community districts are examined, however, the findings offer definite proof of the conditions indicated by the data on valuation, expected income, and tax rate; the township and community high schools spend more and their underlying city elementary districts spend less money per pupil than the corresponding divisions in the unit districts. The average current expenditures per pupil are: unit districts--high school, \$131, city elementary, \$66; township districts--high school, \$141; city elementary, \$61; and rural, \$65; community districts--high school, \$158; city elementary, \$61; and rural, \$64.¹ The township high schools spend 8 per cent and the community high schools spend 21 per cent more per pupil than the unit high schools, but their underlying city elementary schools spend 8 per cent less than the elementary schools in unit districts. The elementary schools underlying the independent high schools may obtain more money for elementary-school purposes than would be the case if they had to support a high school also on the returns of the single tax. They do not, however, within the limits of this study, spend as much money per pupil for their purposes as the elementary-school districts which are still under the unit organization. The independent high-school plan of organization has made it possible for the high schools considered in this study to secure more income per pupil than the unit high school. The fact remains, however, that the city elementary schools underlying the independent high schools still do not have the financial competence of the elementary schools in the unit districts. Even though they levy high taxes (average rates of 1.03 and .98) they cannot secure as much money per pupil as the city elementary schools in unit districts.

¹Since there is no division in the unit districts corresponding to the rural schools in the township and community districts, the per pupil expense in the rural schools will not be considered in the comparisons. It will be noted, however, that the rural schools spend more per pupil than the city elementary schools in the independent districts.

Another view of the differences in expenditures per pupil in the divisions of the three types of districts is provided by an examination of the amounts spent per pupil by each type of high school for each \$1.00 spent by its underlying city elementary district. The amounts are: unit, \$1.99; township, \$2.31; community, \$2.59. The township and community districts pay a much greater amount for high-school education, in proportion to the amount paid for elementary-school education, than the unit districts.

There is, of course, no support for an assertion that the ratio between high-school and elementary-school expenditures in the unit districts is the optimum ratio or that the amounts of the expenditures of the respective divisions in the unit districts are the optimum amounts; nor could such an assertion be made relative to ratios and amounts in the independent districts. There exists nowhere complete and acceptable methods for determining optimum costs that may be declared the standards for a state.¹ An array of observed conditions might be urged to show that the financial situation of the high schools is more desirable and that of the elementary schools is less desirable in the independent districts than in the unit districts. Among these are the following: first, the ratios between high-school and city elementary-school expenditures do not vary with variations in financial competence as much in the unit districts as in the independent districts in this study. Second, these ratios in the unit districts are determined largely by the judgments of the school administrators as to the relative needs of the two divisions, whereas in the independent districts they are determined largely by the legal limits on taxation and the relative wealth of the overlying and underlying districts. Third, 72 out of 846,

¹ Paul R. Mort has set up methods for using data to determine the standard costs for a minimum program of education. He proposes, however, to select his data on the basis of the practices in the schools of average financial competency. The data he uses, therefore, are subject to the errors and limitations of present practices. They are perhaps better guides than any other available today, but the standards produced by their use are certainly bound to present practice. Furthermore, they could not be used in this study. Our problem involves a comparison of practices in the three types of districts. To use the practices in one type as standard would beg the question. To use an average of the practices in the three types would be to include in our standard the unsatisfactory practices we are trying to locate.

or 9 per cent, of the elementary schools in the independent districts of this study made claims for special equalization aid and not a single unit district made such a claim. Only districts which fail to reach the minimum standards of income of \$25 per pupil or \$850 per teacher after the maximum legal rate is extended may make such claims. Fourth, many of the weaknesses of the public schools could be overcome if more revenue were available. Fifth, a low tax rate is more desirable than a high tax rate. These considerations need not be urged as evidence that the ratio of high-school expenditures to elementary-school expenditures is more nearly the optimum ratio in unit districts than in independent districts. The significant fact is that the independent high schools spend much more money per pupil than the unit high schools and the elementary schools in the independent districts spend less money per pupil than the elementary schools in unit districts, and as will be shown later, these disparities are greater in poor districts than in wealthier districts.

Pupils.--The differences between the unit districts and the independent districts in all sections of the State combined in the attendance of pupils, as presented in Chapter VI, are not sufficiently marked to be significant. About 30 per cent of the pupils in high schools and city elementary schools combined are in the high schools in each type of district. This study makes no attempt to determine variations in the influence of the four factors conditioning the number of pupils attending a high school at a given time--original enrolment, regularity of promotion and graduation, retardation, and elimination. It establishes only the one fact, that the three types of high schools do not differ greatly in the percentage of the pupils who attend high school in the district.

The percentage of attendance--average daily attendance divided by enrolment--in the township and community districts is slightly higher than in the unit districts. The percentages are: high school--unit, 91; township, 94; community, 93, and city elementary school--unit, 80; township, 84; and community, 86. In the power of the high school to retain and promote its pupils regularly the unit high schools are slightly superior to the township and community high schools. The differences between the percentages of the high-school pupils in Grade 9 and in Grade 12

are: unit, 12; township, 18; and community, 16. These differences indicate that of the unit high-school pupils entering the 9th grade a higher percentage reach the 12th grade than of the township or community high-school pupils entering the 9th grade. In the percentage of the 1930 graduates attending college in 1931 the three types of high schools differ but little, about 31 per cent in each type of high school attending college.

The greater expenditures of the township and community districts compared with the unit districts, the major portion of which is in the high schools, is not reflected in a significantly greater success in promoting the attendance of pupils.

Teachers.--Teachers' salaries are lower in the unit high schools than in the independent high schools, but are higher in the city elementary schools in the unit districts than in the city elementary schools in township and community districts. The average salaries are: in the high schools--unit, \$1617; township, \$1786; community, \$1740, and in the city elementary schools --unit, \$1215; township, \$1166; community, \$1192. The differences in salaries in the divisions of the three types of districts follow closely the differences in expenditures and need no further comment here.

The differences in average training are almost negligible in the divisions of the three types of districts. In average experience, however--that prior to appointment in the present position and that secured in the present position--the teachers in the divisions of the unit districts generally exceed those in the independent districts by amounts ranging from a half year to two years.

The teaching load, as measured by the pupil-teacher ratio, differs in the three types of districts. The average pupil-teacher ratios are: in the high school--unit, 18.0; township, 14.9; community, 17.2 and in the city elementary school--unit, 28.1; township, 25.7; community, 24.9. In both the high schools and the city elementary schools the independent districts have lower pupil-teacher ratios than the unit districts.

Because of the dual organization the independent districts which have the separate administrators pay much more per pupil for administration than the unit districts. Where the common administrator is employed the per pupil costs are about the same as in unit districts.

Summary.--The independent districts levy a higher tax rate on a higher valuation per pupil than the unit districts. In their high schools they spend more money, secure slightly better attendance of pupils, pay higher salaries to teachers, secure teachers with no more training and with less experience, and retain their teachers for less time than the unit high schools. In their city elementary schools they spend less money per pupil, secure slightly better attendance of pupils, pay lower teachers' salaries, secure teachers with about the same training and with less experience, and retain them for less time than the unit districts. The divisions of the township and community districts have lower pupil-teacher ratios than those in the unit districts.

It is apparent that the independent districts, by higher tax levies and higher tax rates, make a much heavier draught on their taxable wealth than the unit districts. The excess income of independent districts over unit districts is devoted to high-school purposes and not to elementary-school purposes, since the independent high schools are shown to have more money and their underlying elementary schools less money to spend per pupil than the corresponding division in the unit districts. The independent high-school organization, therefore, tends to emphasize the secondary school more and the elementary school less than the unit organization. The comparison of the districts on the basis of the non-financial items of the study reveals that the divisions of the independent districts are not significantly superior and in some cases are inferior to the unit districts in attendance of pupils and qualifications of teachers. Again the emphasis in the independent districts seems to be more on secondary schools and less on elementary schools than in the unit districts.

The extent to which differences corresponding to those in the combined classifications occur in each geographical section of the State and in each enrolment group will be stated briefly with discussion only of the significant variations from the central tendencies just given in detail.

Differences in the Northern Section of the State

The findings for the districts in the Northern Section of the State are distinguished from those in all sections combined in three important particulars. First, the financial situation

of the divisions of all types of districts are distinctly superior. The districts not only have higher assessed valuations per pupil as compared with those in other sections of the State, but also they assess higher tax levies and so realize higher incomes. They are able to spend more money per pupil and to pay higher salaries to teachers than the districts in the other sections of the State.

Second, the township and community high schools are in a better position than the unit high schools in all matters relating to finance. In matters relating to attendance of pupils and teacher personnel, however, the independent high schools are only slightly superior and in some cases inferior to the unit high schools. The township and community high schools spend 20 and 24 per cent, respectively, more money per pupil than the unit high schools. The differences in attendance of pupils are not significant, the unit high schools having stronger holding power and the independent high schools having a slightly higher percentage of graduates attending college. The difference in training of teachers is not significant. The unit high schools secure teachers with more experience and retain them longer, and the independent high schools have a slightly lower pupil-teacher ratio.

Third, the city elementary districts underlying independent high schools spend more money per pupil and pay higher salaries to teachers than the city elementary schools in unit districts. With their independent taxing power, by employing a high tax rate (1.11 in township districts and .97 in community districts) they are able to secure a much higher income than is possible in the less wealthy sections of the State. The greater expenditures of the city elementary districts underlying the independent high schools over the expenditures of the city elementary schools in unit districts are paralleled by higher percentages of attendance of pupils and by better training of teachers. The city elementary schools in unit districts, however, secure teachers with more experience and retain them longer.

The fundamental variation of the findings for the Northern Section of the State from the central tendency, as typified by the findings for all sections of the State combined, lies in the greater financial competence of the city elementary schools underlying independent high schools compared with the financial competence of the independent high schools and of the elementary schools in unit districts. Attendant on this greater financial

competence is a more favorable comparison with the elementary schools in unit districts in pupil attendance and teacher personnel.

It is significant that the city elementary schools underlying independent high schools compare more favorably with the city elementary schools in unit districts than the independent high schools compare with the unit high schools only in the Northern Section where adequate funds for schools are more readily obtainable than in the other sections of the State.

Differences in the Central Section of the State

The findings in the Central Section vary less from the central tendency than those in either the Northern or the Southern Section. Two significant variations, however, should be noted. First, the valuation of the rural property constitutes a much higher percentage of the total valuation of the independent districts than in the other sections of the State. In the Central Section the valuation of the rural property is 64 per cent of the total in the township districts and 61 per cent of the total in the community districts, whereas in all sections of the State combined it is 38 per cent and 43 per cent, respectively.¹ A high percentage of rural valuation makes it possible for the independent high school to support its activities with much less effort, as measured by tax rate, than is possible for the underlying city elementary school. The disparities in appropriate educational opportunity between the two divisions of the independent district is thereby accentuated.

The second significant variation lies in the relatively high average valuation per pupil in township districts and the relatively low average valuation per pupil in community districts. The findings for the township districts correspond roughly to those for the township districts in the Northern Section, and the findings of the community districts correspond closely to those for the unit districts in the Central Section.

¹See Chapter II, p. 30, for the probable causes of variations in ratio of rural property to urban property from section to section.

Differences in the Southern Section
of the State

The findings in the Southern Section deviate more widely from the central tendency than those in either the Northern or the Central Section. Average assessed valuation per pupil is the lowest in this section and, although the tax rates are the highest, the incomes per pupil are the lowest in all divisions of all types of districts. The divisions of the unit districts, however, do not fall as far below the central tendency in matters pertaining to finances as those of the township and community districts, and the township and community high schools do not fall as far below as their underlying city elementary schools. The unit high schools spend \$110 per pupil and their elementary schools spend \$61 per pupil. The corresponding amounts in the township districts are \$110 and \$47 and in the community districts \$141 and \$38. The unit high schools spend only \$1.80 for each \$1.00 spent by their elementary schools, whereas the township high schools spend \$2.34 and the community high schools \$3.71 for each \$1.00 spent by their underlying city elementary schools. An examination of the differences in expenditures between the districts in the Northern and those in the Southern Section reveals that a much higher percentage of the differences between expenditures in the Northern and in the Southern is borne in the independent districts by the city elementary school, whereas in the unit districts the reverse is true. The percentage of the difference in the unit high school is 26 and in its elementary school, 16; the corresponding percentages in the township district are 38 and 47 and in the community, 24 and 51. It is apparent that when the per pupil valuation is high, as in the Northern Section, the city elementary schools underlying township and community high schools are able to maintain as high financial standards as the city elementary schools in unit districts, but when the per pupil valuation is low, as in the Southern Section, they fall far below the financial standards in the unit districts. The independent high schools, however, even in the Southern Section, are able to maintain financial standards as high or higher than the high schools in the unit districts.

In attendance of pupils the independent high schools are

only slightly superior to the unit high schools and their underlying city elementary schools are about equal to the elementary schools in unit districts. The independent high schools are inferior to the unit high schools in training of teachers employed. The township high schools are slightly superior to the unit high schools and the unit high schools are superior to the community high schools both in experience of teachers employed and in retention of teachers. The city elementary schools in the independent districts are inferior to the elementary schools in unit districts in training, experience, and tenure of teachers.

The independent high-school organization apparently makes it possible for the high schools to secure as much financial support as the unit high schools in the Southern Section, but does not solve the financial problem for the underlying city elementary schools. Furthermore, the tax levy and the tax rate are higher in the independent districts than in the unit districts, although the independent high schools are not superior and the underlying elementary schools are inferior to the corresponding divisions in unit districts in pupil attendance and teacher personnel. The people are paying more money and getting less for it in the independent districts than in the unit districts.

Differences in the Enrolment Groups

The findings for the divisions of the three types of districts differ as widely when the districts are classified according to high-school enrolment as when they are classified according to geographical location. No remarkable variations from the trends already described exist, hence a full statement of the facts in each enrolment group is unnecessary.

Close resemblances exist between the findings for Group I and those for the Northern Section and between the findings for Group IV and those for the Southern Section. The resemblances are not in the magnitude of the averages (as the average expenditures per pupil are much less in Group I than in the Northern Section), but in the more significant relationship for this study, the ratios of the averages in the unit districts to the corresponding averages in township and community districts. For example, the average expenditures per pupil in the city elementary schools in unit, township, and community districts of Group I are: \$49, \$64, and \$56, respectively, and of the Northern

Section \$73, \$88, and \$77, respectively. The ratios of the expenditures in unit districts to those in township and community districts are correspondingly in Group I; 100 to 131, and 114; and in the Northern Section 100 to 121, and 106. The resemblances in all the qualities studied are so close that the conclusions supported by the data for the Northern Section are supported also by the data for Group I (page 180), and the conclusions supported by the data for the Southern Section are supported also by the data for Group IV (page 182).

The findings for the districts in Groups II and III vary from the patterns heretofore described. They resemble in part those in Group I and in part those in Group IV, but differ in some particulars from both Groups I and IV from each other. The statements of the conclusions drawn from the data will provide a general description of them.

The data in Group II furnish, within the limits of this study, proof of these statements: first, the independent high schools spend more money than the unit high schools and are superior in some items and inferior in other items; second, the city elementary schools in township districts spend more money per pupil than those in unit districts but are inferior to them in pupil attendance and teacher personnel; and third, those in community districts spend less money than those in unit districts and are inferior to them in pupil attendance and teacher personnel.

The data in Group III furnish, within the limits of this study, proof of these statements: the divisions of the independent districts spend more money than the corresponding divisions in the unit districts and are inferior to them in pupil attendance and teacher personnel.

General Summary

The particulars in which the independent high schools and their underlying elementary schools have been shown in the preceding chapters to differ from those in the unit districts may be summarized in the following statements.

The overlying high-school plan of administrative organization increases the inequalities in the burden of taxation for schools by making a heavier draught on taxable property in the independent districts, as measured by tax levy and tax rate, than is made in the unit districts.

It further increases the inequalities in the tax burden by assessing against rural property a tax for high-school purposes which would not be assessed under the unit plan and which is disproportionate to the number of pupils to be educated.

The excess income of the independent districts over the unit districts, in the State as a whole, is reflected in greater expenditures for high-school purposes but in no greater expenditures for elementary-school purposes than in the unit districts.

Where per pupil valuations are high, as in the Northern Section and in Group I, both high schools and city elementary schools in independent districts exhibit greater financial competence than like divisions in unit districts, but where per pupil valuations are low, as in the Southern Section and in Group IV, only the high schools in the independent districts are as competent or more competent financially than the unit high schools, and the elementary schools in independent districts are much less competent financially than the elementary schools in unit districts.

The independent high-school organization makes it possible for the underlying city elementary schools to raise more revenue than those in the unit organization only in the wealthier districts. In the poorer districts, even though the elementary schools have more money for elementary-school purposes than they would have if they were required to support a high school also on their single tax levy, as is required in the unit districts, they still are not able to offer the children the educational advantage offered by unit districts of like size and locality. The independent high-school organization, although it aids somewhat, does not solve the financial problem for the city elementary schools in the poorer districts.

The greater financial competence of independent high schools is not reflected in superiority of these high schools over unit high schools in pupil attendance and teacher personnel.

The independent high-school plan of administrative organization increases rather than decreases the inequalities in educational opportunities in the State, since in the particulars relating to finance and teacher personnel, the divisions of the independent districts exhibit wider deviations from the central tendencies than the corresponding divisions in the unit districts.

The higher per pupil costs for administrative leadership

in the independent districts than like costs in unit districts throughout the State and particularly in the lower enrolment groups is an extravagance inherent in the dual organization.

Because of the separate boards of education for the two divisions of all the independent districts and the separate administrators for two-thirds of them, the independent districts probably secure poorer vertical articulation than the unit districts.

It is apparent that many of the faults cited in Chapter I are inherent in the dual system of administration and that the independent high schools have not measured up to the expectations of their early supporters.

Further Implications

The independent high school has been found to aggravate, rather than to remove, the shortcomings of the elementary schools in the unit district in Illinois and to have very little advantage, if any, over the unit high schools in providing secondary education. Although many township and community high schools are undoubtedly doing excellent secondary work, the independent high school, as it is now organized, does not offer a solution to the problem of providing adequate elementary and secondary education to all the children of the State. Can it be so modified that its faults will disappear? Should it be abandoned? If it can be modified, what modifications in detail would have to be made and are these modifications feasible? If it should be abandoned, would the unit district, as it now exists, serve the educational needs of the State on the elementary and secondary school levels? If the unit type of district, as it now exists, would not be adequate, could it be so modified as to serve the necessary functions? In short, what reorganizations in the State educational system are necessary and feasible to provide a satisfactory program of elementary and secondary education?

To the first question, Can the overlying high school be so modified that its faults will disappear? the answer appears to be no. It is difficult to see how the independent high school could have a significantly more beneficial effect on elementary education than it has now, which has been shown in this study to be totally inadequate. It cannot lend elementary schools financial aid to lighten their tax burdens and to increase their

educational offerings, for, as we have seen, in the poorer districts where the elementary schools need aid, it also needs aid. Furthermore, the permission to furnish aid to them would involve confusing legislation which would be at best difficult to obtain. To combine with the rural schools to secure vertical articulation,¹ would place the high-school principal under several more masters, the rural boards of directors, and would add confusion throughout the State by infringing on the traditional duties of the county superintendent. Thus, changes in the relationships between independent high schools and city and rural elementary schools to secure better distribution of money, to equalize educational opportunity, to equalize tax burdens, and to secure better vertical articulation are not readily feasible.

Reorganization of secondary education is difficult to accomplish under the township and community high-school law in Illinois. The independent high school may not spend its funds derived from taxation for education below the 9th grade, since the law provides that the district may be organized and the property taxed to operate the four upper years.² Thus, if it wishes to maintain a junior high school embracing grades 7, 8, and 9, it must secure the payment of tuition for 7th and 8th grade pupils, either from the pupils themselves or from the elementary school from which they come. On the other hand, the elementary school may maintain as many years of high school work as it wishes. It may take the money accruing from its single tax or it may secure tuition from the independent high school from which its pupils above the 8th grade come. It is difficult to conceive of the independent high school voluntarily giving up its 9th grade pupils and paying tuition to an underlying elementary school desiring to organize a junior high school. Junior high schools in township and community districts, maintained by either the high-school or the elementary division are very rare in Illinois. Probably the jealousies which have developed between the two divisions or the difficulties of arranging for the payment of tuition curtail their organization. The junior college

¹It has already been told how such combinations with some city elementary schools are operating with varying degrees of success and how they have failed with others.

²Illinois Laws, 1923, p. 592.

as an extension of the independent high school exists in a few districts in Illinois, although no statute specifically authorizes it and no court has passed on its legality.

The large number of township and community high schools in the State, many of them of small size,¹ make horizontal articulation and the economical use of funds difficult. Under the existing laws these districts could be combined to form medium sized community high schools within which the single administration could articulate the work of the pupils much more satisfactorily and between which the State administrative officials could regulate the work to effect better horizontal articulation than is done now in the numerous small districts. These larger districts could command the services of competent administrators who could be expected to manage the school funds with reasonable economy. Local pride and jealousies stand in the way of this type of consolidation. Some independent high school districts have been abandoned, but not one has combined with another to form a larger high-school district. Strong compulsory measures would probably be necessary to effect such consolidations.

If equalization of educational privilege, equalization of tax burden, vertical and horizontal articulation, secondary school reorganization, and economical use of funds are necessary features of a satisfactory school system in Illinois, the independent high school would have to be subjected to a long and difficult, if not impossible, series of modifications in order to serve the State effectively. One must conclude, therefore, that in proposing a suitable school system at the elementary and secondary school levels, the independent high school must be left out of consideration. Englehardt and Zeigel express much the same opinion in the conclusion to their study of the Illinois district organization for the National Survey of Secondary Education.²

The unit district in cities, as it now exists, lacks some

¹There were in 1930-1931 in the small communities in Illinois 162 township and community high schools with enrolments ranging from 12 to 121 pupils and with an average enrolment of 61 pupils.

²Fred Englehardt, William H. Zeigel, Jr., William M. Proctor, and Scovel S. Mayo, District Organization and Secondary Education, p. 208. National Survey of Secondary Education, United States Department of Interior, Bulletin No. 7, Monograph 8. Washington: Office of Education, 1933.

essential features. We have noted in the foregoing chapters that it exhibits wide variations in expenditures per pupil throughout the State and so fails to provide equal educational advantages. It, of course, has no official relationship to adjacent rural elementary schools and so fails to provide for vertical or horizontal articulation within its field. The observed wide variations in assessed valuation per pupil indicate that the tax burden is not equally distributed. The large number of districts with small enrolments in both divisions makes horizontal articulation and economy in the use of funds extremely difficult.

Under the existing laws¹ unit districts may consolidate into community consolidated districts to relieve in part some of the faults mentioned. A few of these consolidations are operating successfully in the State, some for both high-school and elementary-school purposes and some for elementary-school purposes alone. Many more doubtless would be organized except for the hindering influence of the independent high school. Consolidation of the districts within the small territory which usually composes a community consolidated district in Illinois, if organized over the entire State, would relieve only in part the inequalities present in the single districts. The valuations per pupil would still vary as 1 to 14.² If each section of the State, as described for this study, were considered as one district for taxing purposes the valuations per pupil would vary throughout the State as 5 to 8.³ For complete equality the State as a whole would have to be considered as the unit for taxing purposes. The organization of a large unit, such as the State or a section of the State into the sole taxing unit for the schools within it, is perhaps not possible as yet.

Any plan for redistricting the State into efficient and equitable units of administration and taxation will apparently include abandonment of the dual system of administrative organization, consolidation of small districts into larger districts of the community consolidated type, and equalization of the tax burden on a State-wide basis. The inertia of tradition and the opposition of the interests vested in the present organizations will, of course, seriously hinder the adoption of such a plan.

¹Illinois Laws, 1923, p. 584; 1925, p. 559.

²See Chapter II, Table III.

³Ibid.

